



Water-Data Report 2008

08181800 San Antonio River near Elmendorf, TX

San Antonio Basin
Upper San Antonio Subbasin

LOCATION.--Lat 29°13'19", long 98°21'20" referenced to North American Datum of 1927, Bexar County, TX, Hydrologic Unit 12100301, at downstream side of bridge on Farm Road 1604, 2.7 mi southwest of Elmendorf, 3.3 mi downstream from Braunig Plant Lake, and 203.0 mi upstream from mouth.

DRAINAGE AREA.--1,743 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Sept. 1962 to current year.

GAGE.--Water-stage recorder. Datum of gage is 380.00 ft above NGVD of 1929. Sept. 12, 1962 to Dec. 19, 1980, at site 2.5 mi upstream at different datum. Dec. 19, 1980 to Dec. 23, 1986, water-stage recorder at current site and datum. Dec. 24, 1986 to June 15, 1993, water-stage recorder at site 2.8 mi upstream at different datum. Satellite telemeter at station.

REMARKS.--Records good. Since installation of gage in water year 1962, at least 10% of contributing drainage area has been regulated. Water is diverted above station from Medina River for irrigation in the vicinity of Devine and Lytle, with some water diverted for irrigation near San Antonio. The city of San Antonio discharges wastewater effluent into the San Antonio River above the station from their Leon Creek, Medio Creek, Salado Creek, Dos Rios, and Mitchell plants. The San Antonio City Public Service Board diverts water into and returns water from Braunig Lake and Calaveras Lake upstream from this station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1900, 61 ft in 1946. Second highest stage was 53 ft in 1913, from information by local residents at site and datum in use prior to Dec. 19, 1980.

08181800 San Antonio River near Elmendorf, TX—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
DAILY MEAN VALUES

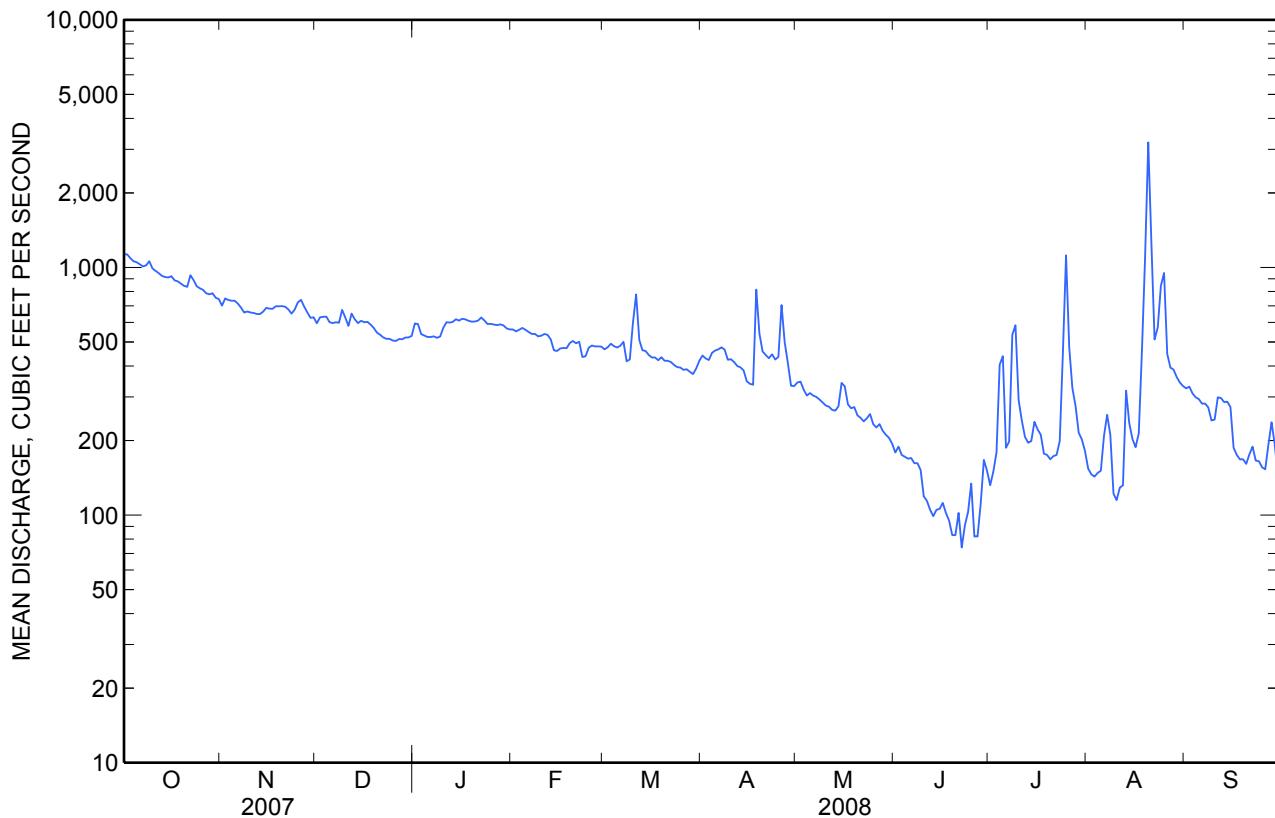
Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	1,130	701	595	594	562	467	441	343	179	132	154	325
2	1,130	750	629	591	552	476	429	346	189	150	146	330
3	1,090	739	632	538	560	492	423	321	175	179	143	310
4	1,060	734	633	531	570	481	452	304	172	405	148	299
5	1,050	734	602	524	560	475	462	311	169	438	151	294
6	1,030	715	596	524	549	483	467	304	170	187	209	282
7	1,010	689	601	527	539	501	476	300	162	198	254	282
8	1,020	658	598	520	539	418	466	293	162	535	211	272
9	1,060	664	674	526	527	425	424	285	152	584	122	241
10	991	658	628	570	530	599	426	277	119	291	115	243
11	969	655	581	601	539	778	415	274	114	241	129	299
12	948	649	651	599	534	510	400	266	105	207	132	297
13	925	648	618	603	512	463	395	264	99	196	318	286
14	915	663	596	618	463	460	384	275	105	199	235	287
15	911	687	609	610	460	443	347	342	106	238	203	273
16	922	682	601	621	471	433	339	331	112	222	188	187
17	887	681	603	617	473	433	336	280	102	211	214	175
18	879	697	588	609	472	422	814	270	95	177	461	168
19	861	697	570	604	495	434	541	273	83	175	1,100	168
20	843	698	546	605	505	420	458	253	83	168	3,200	161
21	835	694	535	610	494	420	443	247	102	173	1,250	176
22	930	677	522	628	501	415	430	239	74	175	512	189
23	890	651	515	611	435	404	446	246	91	199	572	166
24	840	676	515	591	438	396	425	256	103	453	844	165
25	824	723	507	592	474	394	435	233	134	1,120	950	156
26	812	740	505	588	484	386	705	226	82	476	448	153
27	787	695	514	585	480	388	499	233	82	326	394	192
28	779	658	513	589	480	379	411	219	111	276	387	237
29	787	626	521	584	479	371	333	211	167	215	361	194
30	755	629	522	568	---	391	332	205	151	202	343	143
31	745	---	529	562	---	420	---	194	---	181	332	---
Total	28,615	20,568	17,849	18,040	14,677	13,977	13,354	8,421	3,750	8,929	14,226	6,950
Mean	923	686	576	582	506	451	445	272	125	288	459	232
Max	1,130	750	674	628	570	778	814	346	189	1,120	3,200	330
Min	745	626	505	520	435	371	332	194	74	132	115	143
Ac-ft	56,760	40,800	35,400	35,780	29,110	27,720	26,490	16,700	7,440	17,710	28,220	13,790

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 2008, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	630	572	485	500	549	519	538	701	914	830	503	543
Max	4,507	3,350	2,176	2,191	3,803	3,031	1,997	3,293	8,527	12,010	4,805	2,761
(WY)	(1999)	(2005)	(1992)	(1968)	(1992)	(1992)	(1992)	(1992)	(1987)	(2002)	(2007)	(1973)
Min	127	153	160	168	146	143	150	130	88.6	81.9	52.8	120
(WY)	(1997)	(1967)	(1971)	(1967)	(1967)	(1971)	(1967)	(1967)	(1967)	(1964)	(1963)	(1989)

08181800 San Antonio River near Elmendorf, TX—Continued**SUMMARY STATISTICS**

	Calendar Year 2007	Water Year 2008		Water Years 1962 - 2008	
Annual total	560,924		169,356		
Annual mean	1,537		463		607
Highest annual mean				1,784	1992
Lowest annual mean				166	1963
Highest daily mean	33,400	Aug 17	3,200	Aug 20	62,400 Jul 6, 2002
Lowest daily mean	107	Mar 10	74	Jun 22	25 Aug 26, 1963
Annual seven-day minimum	131	Mar 5	90	Jun 17	42 Aug 21, 1963
Maximum peak flow			5,380	Aug 20	75,100 Oct 18, 1998
Maximum peak stage			30.24	Aug 20	64.22 Oct 18, 1998
Annual runoff (ac-ft)	1,113,000		335,900		439,800
10 percent exceeds	3,130		778		1,060
50 percent exceeds	682		456		328
90 percent exceeds	243		162		148



08181800 San Antonio River near Elmendorf, TX—Continued**WATER-QUALITY RECORDS****PERIOD OF RECORD--**

CHEMICAL DATA: Sept. 1964 to Sept. 2004. Dec. 2006 to Oct. 11, 2007. (discontinued).

BIOCHEMICAL DATA: Jan. 1968 to Sept. 2004.

PESTICIDE DATA: Jan. 1968 to Sept. 1981, Dec. 1992 to Sept. 2004.

RADIOCHEMICAL: Dec. 2006 to Oct. 11, 2007. (discontinued).

PERIOD OF DAILY RECORD--

SPECIFIC CONDUCTANCE: Oct. 1966 to current year.

pH: June 1984 to current year.

WATER TEMPERATURE: Oct. 1966 to current year.

DISSOLVED OXYGEN: June 1984 to current year.

INSTRUMENTATION.--A 4-parameter continuous water-quality monitor since June 1984.

REMARKS.--Specific conductance record is excellent, pH record is good, water temperature record is excellent, dissolved oxygen record is good.

Interruptions or periods of missing record may be due to instrument failure, no flow conditions or data corrections exceeding allowable criteria, which were deleted. Other than no flow conditions, minimum and maximum extremes may have occurred during period of missing record.

Other than continuous water-quality data, water-quality data collected at this location are associated with Investigations Project: Surface Water - Ground Water Interaction in the Lower San Antonio Watershed. Water-quality data collection began in Water Year 2007 and was discontinued in Water Year 2008, as noted above in the Period of Record.

EXTREMES FOR PERIOD OF DAILY RECORD--

SPECIFIC CONDUCTANCE: Maximum, 1,240 microsiemens/cm, Jan. 29, 1973, Aug. 8, 1975; minimum, 102 microsiemens/cm, Oct. 17, 1999.

pH: Maximum, 9.0 standard units, June 16, 17 1993; minimum, 7.0 standard units, Oct. 25, 28, 1988, Jan. 11, 1989, Aug. 29, 2002.

WATER TEMPERATURE: Maximum, 33.5°C, June 19, 20, Sept. 2, 1996, July 17, 2006; minimum, 5.5°C, Jan. 10, 1973.

DISSOLVED OXYGEN: Maximum, 16.5 mg/L, Mar. 4, 2002; minimum, 2.2 mg/L, Sept. 21, 2006.

**WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

Part 1 of 5

[Remark codes: <, less than; E, estimated.]

Date	Time	Sample medium and type	Specif-							
			Instan-	pH,	ic			Magnes-		
			stante-	water,	water,	conduc-	Temper-	Calcium	ium,	
			dis-	unfltrd	field,	tance,	ature,	water,	water,	
			charge,	solved	std	wat unf	water,	water,	water,	
			cfs	mg/L	units	μS/cm	water,	water,	water,	
			(00061)	(00300)	(00400)	25 degC	deg C	(00010)	(00915)	(00925)
Dec 21...	0930	Surface water, regular	211	7.3	7.7	1,040	21.0	87.0	18.9	

08181800 San Antonio River near Elmendorf, TX—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Part 2 of 5

[Remark codes: <, less than; E, estimated.]

Date	Potas-	Bicar-	Carbon-	Hydrox-							Residue		
	sium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	Alka- linity, wat flt inf tit	Bonate, wat flt infl pt	Ate, wat flt infl pt	ide, wat flt infl pt	Bromide	Chlor- ide, water, fltrd, mg/L (71834)	Fluor- ide, water, fltrd, mg/L (00940)	Silica, water, fltrd, mg/L as SiO2 (00955)	Sulfate	on evap. at water, fltrd, mg/L as N (00608)	
Dec 21...	13.0	88.5	202	244	.0	<.1	.20	119	.88	13.6	74.5	619	.070

WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Part 3 of 5

[Remark codes: <, less than; E, estimated.]

Date	Nitrate + nitrite water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Total nitro- gen, wat unf by anal (62855)	Ortho- phos- phate, water, fltrd, mg/L as P (00671)	Phos- phorus, water, unfltrd mg/L as P (00665)	Alum- inum, water, fltrd, mg/L as P (01106)	Anti- mony, water, fltrd, μg/L (01095)	Arsenic water, fltrd, μg/L (01000)	Barium, water, fltrd, μg/L (01005)	Beryll- ium, water, fltrd, μg/L (01010)	Boron, water, fltrd, μg/L (01020)	Cadmium water, fltrd, μg/L (01025)	Chrom- ium, water, fltrd, μg/L (01030)
Dec 21...	16.0	.028	16.9	1.86	1.88	1.6	.41	.85	26	<.06	255	E.03	.46

WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Part 4 of 5

[Remark codes: <, less than; E, estimated.]

Date	Cobalt water, fltrd, μg/L (01035)	Copper, water, fltrd, μg/L (01040)	Iron, water, fltrd, μg/L (01046)	Lead, water, fltrd, μg/L (01049)	Lithium water, fltrd, μg/L (01130)	Mangan- ese, water, fltrd, μg/L (01056)	Molyb- denum, water, fltrd, μg/L (01060)	Nickel, water, fltrd, μg/L (01065)	Selenium, water, fltrd, μg/L (01145)	Silver, water, fltrd, μg/L (01075)	Stront- ium, water, fltrd, μg/L (01080)	Thall- ium, water, fltrd, μg/L (01057)	Vana- dium, water, fltrd, μg/L (01085)
Dec 21...	.44	1.1	41	E.11	13.4	19.1	6.1	3.5	.46	E.1	744	E.02	2.2

08181800 San Antonio River near Elmendorf, TX—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Part 5 of 5

[Remark codes: <, less than; E, estimated.]

Date	Sr-87/ Sr-86		Uranium natural		Deu- terium/ Protium		0-18 / 0-16	
	Zinc, water, filtrd, μg/L (01090)	ratio, water, filtrd, per mil (75978)	water, filtrd, per mil (22703)	water, filtrd, unfiltrd per mil (82082)	water, unfiltrd per mil (82085)	ratio, water, unfiltrd per mil	ratio, water, unfiltrd per mil	ratio, water, unfiltrd per mil
Dec 21...	10.8	.70797	.60	-19.47	-3.30			

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 1 of 5

[Remark codes: <, less than; E, estimated.]

Date	Time	Sample medium and type	Instan- taneous dis- charge, cfs (00061)		Baro- metric pres- sure, mm Hg (00025)		Dis- solved oxygen, mg/L (00300)		pH, water, unfiltrd units (00400)	Specif- ic conduc- tance, wat unf μS/cm (00095)		Temper- ature, air, deg C (00020)	Temper- ature, water, deg C (00010)
Oct 11...	1110	Surface water, regular	957		748		6.9		7.9	737		34.5	26.0

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 2 of 5

[Remark codes: <, less than; E, estimated.]

Date	Magnes- ium, water, filtrd, mg/L (00915)		Potas- sium, water, filtrd, mg/L (00925)		Alka- linity, wat flt infl tit		Bicar- bonate, wat flt infl pt		Carbon- ate, wat flt infl pt		Hydrox- ide, wat flt infl pt		Chlor- ide, water, filtrd, mg/L (71834)	Fluor- ide, water, filtrd, mg/L (71870)	Silica, water, filtrd, mg/L SiO2 (00950)	Sulfate water, filtrd, mg/L (00945)
Oct 11...	83.5	17.1	4.85	41.9	202	245	.0	<.1	.19	52.0	.38	12.1	58.3			

08181800 San Antonio River near Elmendorf, TX—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 3 of 5

[Remark codes: <, less than; E, estimated.]

Date	Residue on evap.												
	Alum- inum, water, wat flt 180degC	Anti- mony, water, fltrd,	Arsenic water, fltrd,	Barium, water, fltrd,	Beryll- ium, water, fltrd,	Boron, water, fltrd,	Cadmium water, fltrd,	Chrom- ium, water, fltrd,	Cobalt water, fltrd,	Copper, water, fltrd,	Iron, water, fltrd,	Lead, water, fltrd,	
mg/L (70300)	µg/L (01106)	µg/L (01095)	µg/L (01000)	µg/L (01005)	µg/L (01010)	µg/L (01020)	µg/L (01025)	µg/L (01030)	µg/L (01035)	µg/L (01040)	µg/L (01046)	µg/L (01049)	
Oct 11...	437	2.8	E.13	.97	47	<.01	165	<.04	.19	.20	1.4	9	.11

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 4 of 5

[Remark codes: <, less than; E, estimated.]

Date	Deu- terium/ Protium												
	Lithium water, fltrd, µg/L (01130)	Mangan- ese, water, fltrd, µg/L (01056)	Molyb- denum, water, fltrd, µg/L (01060)	Nickel, water, fltrd, µg/L (01065)	Selen- ium, water, fltrd, µg/L (01145)	Silver, water, fltrd, µg/L (01075)	Stront- ium, water, fltrd, µg/L (01080)	Thall- ium, water, fltrd, µg/L (01057)	Vana- dium, water, fltrd, µg/L (01085)	Zinc, water, fltrd, µg/L (01090)	Sr-87/ Sr-86 ratio, per mil (75978)	Uranium water, fltrd, µg/L (22703)	ratio, per mil (82082)
µg/L (01130)	µg/L (01056)	µg/L (01060)	µg/L (01065)	µg/L (01145)	µg/L (01075)	µg/L (01080)	µg/L (01057)	µg/L (01085)	µg/L (01090)	per mil (75978)	natural water, fltrd, µg/L (22703)	water, unfltrd, µg/L (82082)	
Oct 11...	12.6	6.8	1.9	2.0	.64	<.1	667	<.04	2.7	4.4	.70792	.84	-23.61

**WATER-QUALITY
DATA**
**WATER YEAR
OCTOBER 2007 TO
SEPTEMBER 2008**

Part 5 of 5

[Remark codes:
<, less than;
E, estimated.]

Date	0-18 / 0-16 ratio, water, unfiltrd per mil (82085)
Oct 11...	-3.83

EXTREMES FOR CURRENT YEAR--

SPECIFIC CONDUCTANCE: Maximum, 1,130 microsiemens/cm, June 22; minimum, 225 microsiemens/cm, Aug. 20.
pH: Maximum, 8.5 standard units, Mar. 25; minimum, 7.6 standard units, Apr. 18, 26, Aug. 24, 25, 26.

WATER TEMPERATURE: Maximum, 33.2°C, Aug. 3; minimum, 14.0°C, Jan. 20.

DISSOLVED OXYGEN: Maximum, 11.8 mg/L, Jan. 2; minimum, 4.0 mg/L, July 4.

08181800 San Antonio River near Elmendorf, TX—Continued
SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
October				November				December				January
1	707	689	697	799	774	784	808	778	791	810	789	802
2	723	684	703	807	778	790	813	788	799	814	737	787
3	729	706	718	802	777	789	805	782	791	817	741	777
4	745	717	730	802	777	790	813	767	788	805	783	793
5	732	718	727	800	776	786	814	781	796	812	782	798
6	732	715	726	811	769	787	811	777	794	815	782	799
7	736	714	728	808	783	794	808	779	791	807	782	794
8	727	711	719	813	777	797	803	771	785	842	783	807
9	749	709	724	816	784	797	802	779	789	842	795	817
10	748	726	736	811	776	796	794	769	778	830	788	807
11	749	729	737	813	783	795	821	768	793	827	785	804
12	744	730	736	795	732	778	821	750	787	826	783	804
13	747	728	737	809	766	785	828	784	806	834	787	805
14	753	729	743	817	778	798	832	795	811	824	785	801
15	749	729	741	816	790	805	829	794	806	821	776	792
16	769	706	739	818	784	801	835	807	819	833	783	803
17	774	751	763	820	778	797	825	803	814	832	783	806
18	770	755	762	813	786	798	827	796	809	829	777	799
19	776	752	763	795	776	786	829	797	813	828	779	799
20	784	756	769	807	774	789	835	804	817	835	790	809
21	782	753	770	815	785	796	837	805	821	821	779	795
22	774	687	748	804	776	790	839	802	820	824	782	801
23	774	698	746	825	763	783	835	790	812	848	795	812
24	772	745	761	790	744	768	817	786	796	853	819	833
25	785	743	761	789	752	774	812	776	792	854	825	838
26	784	754	766	793	748	774	802	770	788	854	817	834
27	777	753	767	818	774	796	820	786	799	855	824	838
28	780	758	770	828	793	806	827	800	811	849	811	826
29	775	755	765	812	784	797	827	797	811	857	809	829
30	792	749	768	808	779	792	824	785	801	857	817	840
31	793	765	781	---	---	---	809	777	794	867	827	843
Month	793	684	745	828	732	791	839	750	801	867	737	809

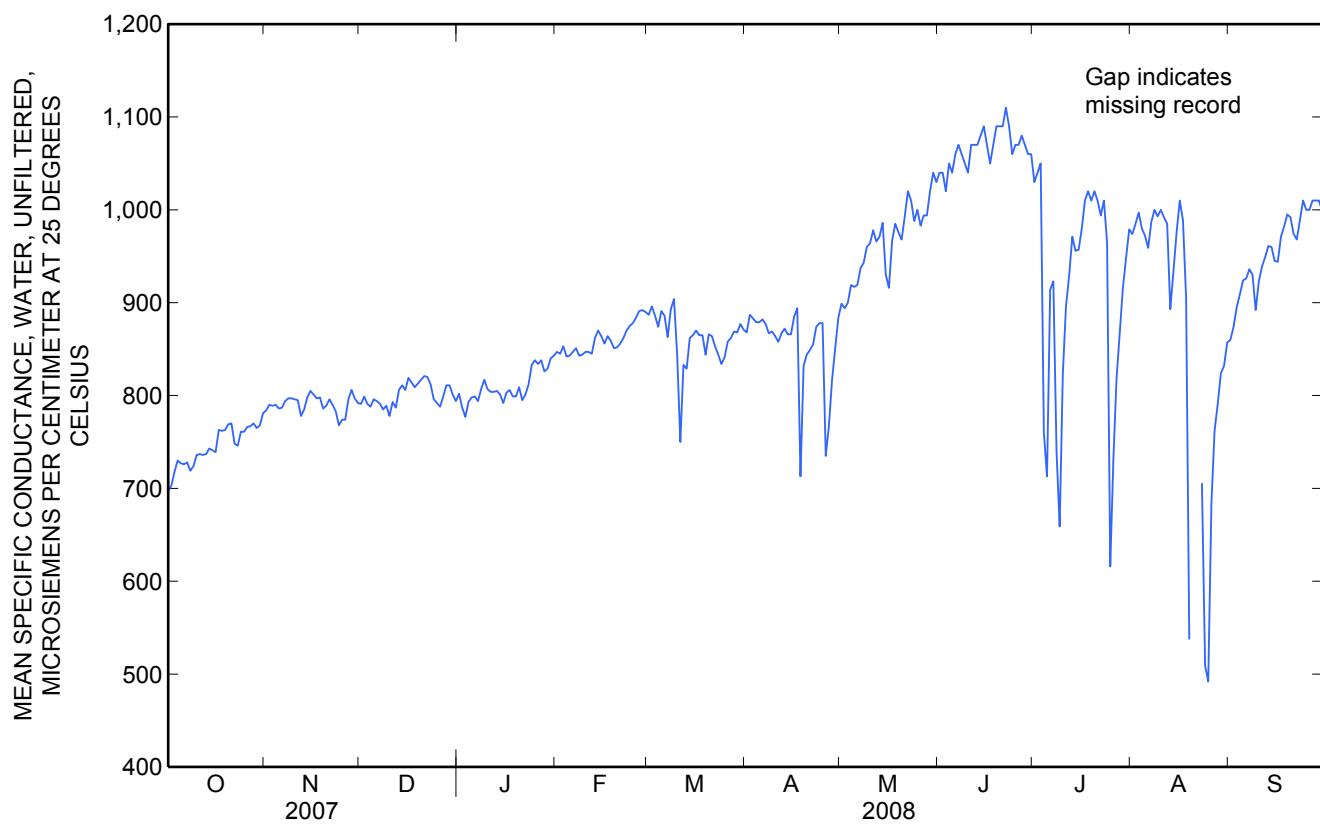
08181800 San Antonio River near Elmendorf, TX—Continued
SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
February				March				April				May
1	868	823	847	903	866	887	890	838	868	919	866	899
2	872	829	845	920	864	896	909	844	887	912	868	894
3	881	826	853	912	858	886	895	862	883	910	873	900
4	856	828	842	887	848	874	904	845	879	936	892	919
5	859	824	843	901	863	891	898	849	879	945	878	917
6	870	824	847	908	850	886	906	848	882	934	890	919
7	871	832	851	895	830	863	907	844	877	953	910	937
8	862	826	843	915	879	893	887	845	867	971	915	943
9	861	822	844	929	875	904	890	840	869	983	928	960
10	871	827	847	906	609	844	880	839	864	979	946	964
11	872	826	847	864	554	750	874	835	858	999	940	978
12	870	832	845	855	812	833	888	844	867	987	928	966
13	883	839	862	855	813	829	899	849	872	1,000	935	971
14	887	847	870	876	849	862	892	847	866	1,010	957	986
15	884	843	864	884	841	865	878	846	866	983	855	930
16	882	829	856	894	844	870	899	864	885	942	863	916
17	877	847	864	885	847	865	909	874	894	981	942	967
18	881	831	859	882	843	865	901	473	713	999	956	985
19	865	826	851	863	824	844	859	793	832	991	933	976
20	871	829	852	883	848	866	874	816	844	989	947	968
21	878	813	856	897	826	864	879	818	849	1,020	962	993
22	884	847	862	876	821	853	879	841	855	1,050	989	1,020
23	894	840	870	872	814	844	884	848	874	1,030	981	1,010
24	895	855	875	861	801	834	900	850	878	1,020	959	988
25	892	863	878	855	815	841	910	845	878	1,010	974	1,000
26	895	869	884	874	832	858	895	602	735	999	965	983
27	909	865	891	880	833	862	794	747	767	1,020	965	994
28	914	865	892	882	850	869	837	794	817	1,030	968	994
29	914	864	890	883	845	868	869	830	851	1,040	981	1,020
30	---	---	---	910	828	877	900	859	884	1,060	1,010	1,040
31	---	---	---	890	846	871	---	---	---	1,050	1,010	1,030
Month	914	813	860	929	554	862	910	473	855	1,060	855	967

Water-Data Report 2008

08181800 San Antonio River near Elmendorf, TX—Continued**SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	
June				July				August				September	
1	1,060	1,010	1,040	1,050	1,020	1,030	1,000	932	974	888	825	860	
2	1,060	1,030	1,040	1,060	1,010	1,040	1,010	942	985	893	845	874	
3	1,050	1,000	1,020	1,070	952	1,050	1,010	953	997	918	874	895	
4	1,060	1,030	1,050	952	657	760	1,000	936	980	928	894	909	
5	1,050	1,030	1,040	914	601	713	1,000	929	972	941	884	924	
6	1,070	1,050	1,060	934	842	914	992	922	959	937	882	926	
7	1,080	1,060	1,070	943	872	923	1,020	932	987	963	887	936	
8	1,080	1,050	1,060	928	675	740	1,020	959	1,000	949	891	930	
9	1,060	1,040	1,050	805	567	659	1,020	956	993	921	875	892	
10	1,060	1,020	1,040	846	804	823	1,030	960	1,000	942	905	923	
11	1,080	1,060	1,070	920	846	896	1,020	980	992	952	915	939	
12	1,080	1,060	1,070	947	887	929	1,020	967	985	961	932	949	
13	1,090	1,060	1,070	986	925	971	1,030	792	893	977	928	961	
14	1,100	1,070	1,080	973	913	956	957	896	934	978	920	960	
15	1,100	1,080	1,090	994	913	957	1,000	928	976	969	914	945	
16	1,100	1,060	1,070	1,010	932	980	1,030	974	1,010	966	919	944	
17	1,070	1,040	1,050	1,030	971	1,010	1,020	928	989	996	939	971	
18	1,080	1,060	1,070	1,040	988	1,020	972	515	905	1,010	944	982	
19	1,120	1,080	1,090	1,030	987	1,010	658	464	538	1,010	958	995	
20	1,100	1,080	1,090	1,050	996	1,020	662	---	---	1,010	952	992	
21	1,110	1,070	1,090	1,020	986	1,010	---	---	---	997	927	974	
22	1,130	1,090	1,110	1,010	981	994	725	---	---	980	933	968	
23	1,110	1,060	1,090	1,030	980	1,010	737	657	705	1,010	960	989	
24	1,070	1,040	1,060	1,050	452	965	662	403	509	1,040	972	1,010	
25	1,080	1,050	1,070	704	472	616	620	403	492	1,020	965	1,000	
26	1,080	1,060	1,070	788	664	732	762	620	684	1,030	975	1,000	
27	1,100	1,070	1,080	829	788	819	804	741	762	1,020	987	1,010	
28	1,080	1,060	1,070	890	829	867	814	731	791	1,040	977	1,010	
29	1,070	1,050	1,060	952	851	916	851	800	824	1,020	973	1,010	
30	1,090	1,050	1,060	974	906	948	858	799	832	1,030	971	999	
31	---	---	---	1,010	930	979	883	828	857	---	---	---	
Month	1,130	1,000	1,070	1,070	452	912	---	---	---	1,040	825	956	

08181800 San Antonio River near Elmendorf, TX—Continued

Water-Data Report 2008

08181800 San Antonio River near Elmendorf, TX—Continued**PH, WATER, UNFILTERED, FIELD, STANDARD UNITS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Day	Max	Min	Median	Max	Min	Median	Max	Min	Median	Max	Min	Median	
October				November				December				January	
1	7.9	7.8	7.8	8.0	7.9	7.9	7.9	7.8	7.8	8.1	8.0	8.0	
2	7.9	7.8	7.8	8.0	7.9	7.9	7.8	7.7	7.8	8.1	8.0	8.0	
3	7.9	7.7	7.8	8.0	7.8	7.9	7.9	7.8	7.8	8.1	8.0	8.1	
4	7.9	7.8	7.8	7.9	7.8	7.8	7.9	7.8	7.8	8.1	8.0	8.0	
5	7.9	7.8	7.8	7.9	7.8	7.8	7.9	7.8	7.8	8.1	8.0	8.0	
6	7.9	7.8	7.8	7.9	7.7	7.8	7.9	7.8	7.8	8.1	7.9	8.0	
7	7.9	7.8	7.8	7.9	7.8	7.8	7.9	7.8	7.8	8.0	7.9	7.9	
8	7.8	7.8	7.8	7.9	7.8	7.8	7.9	7.8	7.8	8.1	7.9	8.0	
9	7.8	7.8	7.8	7.9	7.8	7.8	7.8	7.7	7.8	8.0	7.9	8.0	
10	7.9	7.8	7.8	7.8	7.8	7.8	7.8	7.7	7.8	8.0	7.9	7.9	
11	7.9	7.8	7.8	7.8	7.8	7.8	7.9	7.7	7.8	8.0	7.9	7.9	
12	7.9	7.8	7.8	7.8	7.7	7.8	7.9	7.8	7.9	8.1	7.9	7.9	
13	7.9	7.8	7.8	7.8	7.8	7.8	7.9	7.8	7.9	8.1	7.9	8.0	
14	7.9	7.8	7.8	7.9	7.7	7.8	7.9	7.9	7.9	8.0	7.9	7.9	
15	7.9	7.8	7.8	8.0	7.9	7.9	8.0	7.9	7.9	8.0	7.9	7.9	
16	7.8	7.8	7.8	8.0	7.9	7.9	8.0	7.9	7.9	8.0	7.9	7.9	
17	7.9	7.7	7.8	8.0	7.9	7.9	8.0	7.9	7.9	8.0	7.9	7.9	
18	7.9	7.8	7.9	7.9	7.9	7.9	7.9	7.9	7.9	8.0	7.9	7.9	
19	7.9	7.8	7.8	7.9	7.9	7.9	7.9	7.9	7.9	8.0	7.9	8.0	
20	7.9	7.8	7.9	7.9	7.9	7.9	7.9	7.8	7.9	8.0	7.9	8.0	
21	7.9	7.8	7.9	7.9	7.8	7.9	8.0	7.9	7.9	8.0	7.9	7.9	
22	7.9	7.8	7.8	8.0	7.9	7.9	8.1	8.0	8.0	8.0	7.9	7.9	
23	7.9	7.8	7.9	8.0	7.9	8.0	8.1	8.0	8.0	8.0	7.9	7.9	
24	7.9	7.9	7.9	8.0	8.0	8.0	8.1	8.0	8.1	8.0	7.9	7.9	
25	8.0	7.9	7.9	8.0	8.0	8.0	8.1	8.0	8.0	8.0	7.9	7.9	
26	8.0	7.9	7.9	8.0	7.9	7.9	8.1	7.9	8.0	8.0	7.9	7.9	
27	8.0	7.9	7.9	7.9	7.9	7.9	8.0	7.9	7.9	8.1	7.9	7.9	
28	8.0	7.9	7.9	7.9	7.9	7.9	8.0	7.9	7.9	8.1	7.9	7.9	
29	8.0	7.9	7.9	7.9	7.8	7.9	8.0	7.9	7.9	8.0	7.8	7.9	
30	8.0	7.9	7.9	7.9	7.8	7.8	8.1	7.9	7.9	8.0	7.9	7.9	
31	8.0	7.8	7.9	---	---	---	8.1	8.0	8.0	8.0	7.9	7.9	
Max	8.0	7.9	7.9	8.0	8.0	8.0	8.1	8.0	8.1	8.1	8.0	8.1	
Min	7.8	7.7	7.8	7.8	7.7	7.8	7.8	7.7	7.8	8.0	7.8	7.9	

Water-Data Report 2008

08181800 San Antonio River near Elmendorf, TX—Continued
PH, WATER, UNFILTERED, FIELD, STANDARD UNITS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Median	Max	Min	Median	Max	Min	Median	Max	Min	Median	
February				March				April				May	
1	8.0	7.9	7.9	8.0	7.8	7.9	8.3	8.2	8.2	8.2	8.1	8.2	
2	8.0	7.9	7.9	8.0	7.9	7.9	8.3	8.0	8.0	8.2	8.1	8.1	
3	8.0	7.9	8.0	8.1	7.9	7.9	8.0	7.9	8.0	8.2	8.1	8.1	
4	8.0	7.9	7.9	8.1	8.0	8.1	8.1	8.0	8.0	8.3	8.1	8.2	
5	8.0	7.9	7.9	8.2	8.0	8.1	8.1	8.0	8.1	8.3	8.2	8.2	
6	8.1	7.9	8.0	8.2	8.1	8.1	8.1	8.0	8.1	8.2	8.1	8.2	
7	8.1	8.0	8.0	8.3	8.2	8.2	8.1	8.0	8.0	8.2	8.1	8.2	
8	8.1	8.0	8.0	8.4	8.2	8.3	8.1	8.0	8.0	8.3	8.2	8.2	
9	8.1	8.0	8.0	8.3	8.3	8.3	8.1	8.0	8.0	8.3	8.1	8.2	
10	8.0	7.9	8.0	8.4	8.2	8.3	8.1	8.0	8.1	8.2	8.1	8.1	
11	8.0	7.9	7.9	8.4	8.2	8.3	8.1	8.0	8.1	8.3	8.0	8.1	
12	8.0	7.9	7.9	8.3	8.1	8.2	8.2	8.1	8.1	8.3	8.0	8.2	
13	8.0	7.8	7.9	8.2	8.1	8.1	8.2	8.1	8.1	8.3	8.1	8.1	
14	7.9	7.8	7.8	8.2	8.1	8.1	8.2	8.1	8.1	8.2	8.0	8.1	
15	7.8	7.8	7.8	8.2	8.1	8.1	8.2	8.1	8.1	8.2	8.0	8.1	
16	7.9	7.7	7.8	8.2	8.1	8.2	8.3	8.1	8.2	8.1	8.0	8.1	
17	7.9	7.8	7.9	8.2	8.1	8.2	8.2	7.9	8.1	8.1	8.0	8.0	
18	7.9	7.8	7.9	8.3	8.1	8.2	8.1	7.6	7.8	8.1	7.9	8.0	
19	8.0	7.8	7.9	8.3	8.2	8.2	7.9	7.8	7.9	8.2	8.1	8.1	
20	7.9	7.8	7.9	8.3	8.2	8.3	8.0	7.9	8.0	8.2	8.0	8.1	
21	7.9	7.8	7.8	8.4	8.2	8.3	8.0	8.0	8.0	8.3	8.1	8.2	
22	7.9	7.8	7.8	8.3	8.2	8.2	8.0	7.8	7.9	8.2	8.0	8.1	
23	8.0	7.8	7.8	8.3	8.2	8.3	7.9	7.8	7.9	8.1	7.9	8.0	
24	8.0	7.9	8.0	8.4	8.3	8.4	8.0	7.9	7.9	8.1	7.9	8.0	
25	8.0	7.9	7.9	8.5	8.3	8.4	8.0	7.9	7.9	8.1	7.9	8.0	
26	8.0	7.9	7.9	8.4	8.3	8.4	7.9	7.6	7.7	8.1	7.9	8.0	
27	8.0	7.8	7.9	8.4	8.3	8.4	7.8	7.7	7.7	8.1	7.9	8.0	
28	8.0	7.8	7.8	8.4	8.3	8.3	7.8	7.8	7.8	8.1	8.0	8.0	
29	8.0	7.9	7.9	8.4	8.3	8.3	8.2	7.8	8.1	8.1	7.8	7.9	
30	---	---	---	8.3	8.2	8.3	8.2	8.1	8.2	8.0	7.8	7.9	
31	---	---	---	8.3	8.1	8.2	---	---	---	8.0	7.8	7.9	
Max	8.1	8.0	8.0	8.5	8.3	8.4	8.3	8.2	8.2	8.3	8.2	8.2	
Min	7.8	7.7	7.8	8.0	7.8	7.9	7.8	7.6	7.7	8.0	7.8	7.9	

Water-Data Report 2008

08181800 San Antonio River near Elmendorf, TX—Continued**PH, WATER, UNFILTERED, FIELD, STANDARD UNITS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Day	Max	Min	Median	Max	Min	Median	Max	Min	Median	Max	Min	Median
				June			July			August		
1	8.0	7.8	7.9	8.1	8.0	8.0	8.1	8.0	8.1	7.9	7.8	7.8
2	8.0	7.9	7.9	8.2	8.0	8.1	8.1	8.0	8.1	7.9	7.8	7.8
3	8.0	7.8	7.9	8.2	8.0	8.1	8.1	7.9	8.0	7.9	7.8	7.8
4	8.2	7.7	8.1	8.0	7.7	7.8	8.1	7.9	8.0	7.9	7.8	7.8
5	8.2	8.0	8.1	8.1	7.7	7.9	8.1	7.9	8.0	8.0	7.8	7.9
6	8.1	8.0	8.1	8.1	8.0	8.0	8.1	7.9	8.0	8.0	7.8	7.9
7	8.1	8.0	8.1	8.1	8.0	8.0	8.1	7.9	8.0	8.0	7.8	7.9
8	8.1	8.0	8.1	8.1	7.9	7.9	8.1	7.9	8.0	8.0	7.8	7.8
9	8.2	8.0	8.0	8.0	7.8	7.9	8.1	7.9	8.0	7.9	7.8	7.8
10	8.1	8.0	8.1	8.1	7.9	8.0	8.1	7.9	8.0	8.2	7.8	8.1
11	8.1	8.0	8.1	8.1	8.0	8.0	8.1	7.9	8.0	8.2	8.1	8.1
12	8.1	8.0	8.1	8.1	8.0	8.0	8.0	7.9	7.9	8.2	8.1	8.1
13	8.1	8.0	8.0	8.2	8.0	8.0	8.0	7.8	8.0	8.2	8.1	8.1
14	8.1	8.0	8.1	8.2	8.0	8.1	8.1	7.9	7.9	8.2	8.0	8.1
15	8.2	8.0	8.1	8.2	8.0	8.0	8.1	7.9	8.0	8.2	8.0	8.1
16	8.1	8.0	8.1	8.2	8.0	8.1	8.1	7.9	8.0	8.1	8.0	8.1
17	8.2	8.0	8.1	8.2	8.1	8.1	8.1	8.0	8.0	8.1	7.9	8.0
18	8.1	8.0	8.1	8.3	8.1	8.1	8.1	7.7	7.9	8.1	7.9	8.0
19	8.2	8.0	8.1	8.3	8.1	8.2	7.9	7.7	7.7	8.1	7.9	8.0
20	8.1	7.9	8.0	8.3	8.1	8.2	---	---	---	8.1	7.9	8.0
21	8.1	7.9	7.9	8.2	8.0	8.2	---	---	---	8.1	7.9	8.0
22	8.0	7.9	7.9	8.2	8.0	8.1	---	---	---	8.1	7.9	8.0
23	8.1	7.9	8.0	8.1	7.9	8.0	7.9	7.8	7.9	8.0	7.9	8.0
24	8.1	7.9	8.0	8.1	7.7	8.0	7.8	7.6	7.7	8.0	7.9	8.0
25	8.1	8.0	8.1	7.9	7.7	7.8	7.7	7.6	7.7	8.1	7.9	8.0
26	8.1	8.0	8.0	7.9	7.9	7.9	7.7	7.6	7.7	8.1	7.9	8.0
27	8.1	8.0	8.0	8.0	7.9	7.9	7.7	7.7	7.7	8.1	7.9	8.0
28	8.1	8.0	8.1	8.0	7.9	7.9	7.8	7.7	7.7	8.1	7.9	8.0
29	8.1	8.0	8.1	8.1	7.9	8.0	7.8	7.7	7.8	8.1	7.9	8.0
30	8.1	8.0	8.1	8.1	8.0	8.0	7.9	7.8	7.8	8.1	7.9	8.0
31	---	---	---	8.1	8.0	8.1	7.9	7.8	7.8	---	---	---
Max	8.2	8.0	8.1	8.3	8.1	8.2	---	---	---	8.2	8.1	8.1
Min	8.0	7.7	7.9	7.9	7.7	7.8	---	---	---	7.9	7.8	7.8

08181800 San Antonio River near Elmendorf, TX—Continued
TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
October				November			December			January		
1	27.5	26.6	26.9	22.3	21.1	21.6	21.1	19.9	20.4	17.0	15.5	16.1
2	27.9	26.8	27.2	22.6	21.2	21.8	21.8	21.0	21.4	15.9	14.4	14.9
3	27.7	26.5	27.1	23.2	21.7	22.5	21.4	19.4	20.1	15.2	14.3	14.7
4	27.1	25.9	26.5	23.1	22.1	22.7	19.4	18.0	18.5	16.4	14.5	15.1
5	27.0	25.8	26.3	23.7	22.3	23.0	19.0	17.6	18.3	18.2	16.1	17.0
6	27.1	26.0	26.5	23.5	21.8	22.5	20.0	18.2	19.0	19.2	17.7	18.4
7	26.7	25.9	26.3	21.8	20.6	21.0	21.5	19.8	20.5	20.4	19.2	19.6
8	27.2	26.2	26.6	21.7	20.1	20.8	22.3	21.2	21.7	20.8	20.0	20.4
9	27.2	26.2	26.7	22.9	21.3	22.1	22.8	22.1	22.5	20.0	18.6	19.1
10	27.3	26.2	26.7	23.5	22.5	23.0	22.4	20.1	20.9	19.0	18.1	18.6
11	27.1	26.2	26.6	23.7	22.7	23.3	22.0	20.3	21.0	18.5	17.3	17.8
12	26.6	25.6	26.1	23.8	22.9	23.3	22.0	19.8	20.8	18.0	17.0	17.6
13	26.0	25.1	25.6	24.2	23.1	23.7	19.8	18.7	19.1	17.8	16.5	17.1
14	26.0	25.1	25.5	24.3	23.4	23.9	19.6	18.9	19.1	17.3	16.1	16.5
15	26.7	25.5	26.0	23.8	21.1	22.0	19.6	18.7	19.2	17.0	16.0	16.5
16	26.3	25.3	25.6	21.1	19.7	20.2	18.7	17.1	17.6	17.2	16.3	16.7
17	26.5	25.1	25.7	21.4	20.1	20.5	17.4	16.0	16.6	17.2	15.3	16.1
18	26.8	25.8	26.2	22.1	21.1	21.5	18.8	17.0	17.8	15.8	14.2	14.9
19	26.4	25.1	25.6	22.6	21.5	22.0	19.8	18.4	18.9	15.1	14.1	14.6
20	25.2	24.1	24.7	23.4	22.3	22.9	19.9	19.3	19.7	15.4	14.0	14.7
21	25.2	24.1	24.7	24.0	22.9	23.4	19.8	18.4	18.9	16.6	15.2	15.5
22	25.1	22.3	24.0	23.1	19.6	20.9	19.3	18.3	18.9	17.8	16.6	17.3
23	22.3	21.2	21.7	19.6	17.5	18.2	18.3	16.6	17.3	17.7	15.8	16.6
24	22.0	20.8	21.3	18.0	16.5	17.1	16.9	15.7	16.3	16.4	14.9	15.5
25	21.9	21.0	21.4	17.1	16.6	16.9	16.8	15.7	16.3	15.7	14.8	15.2
26	21.7	20.4	21.0	17.5	16.5	17.0	17.2	16.6	17.0	17.3	15.4	16.1
27	21.4	20.4	20.9	17.7	16.6	17.2	17.3	16.1	16.6	18.1	16.7	17.4
28	21.4	20.4	20.9	18.6	16.9	17.6	17.6	16.8	17.2	19.1	17.8	18.2
29	21.8	20.6	21.1	19.3	17.9	18.5	17.4	16.1	16.5	19.7	19.0	19.3
30	21.9	20.6	21.2	20.1	18.6	19.2	16.6	15.5	16.2	19.0	17.4	17.9
31	22.3	20.7	21.4	---	---	---	17.0	15.6	16.5	18.0	17.4	17.7
Month	27.9	20.4	24.6	24.3	16.5	21.0	22.8	15.5	18.7	20.8	14.0	16.9

08181800 San Antonio River near Elmendorf, TX—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
February				March				April				May
1	17.4	16.2	16.8	22.0	20.8	21.3	25.4	23.6	24.4	25.7	24.4	24.9
2	18.4	16.1	17.1	22.1	21.5	21.7	24.7	23.3	23.8	27.3	25.1	26.0
3	20.4	18.4	19.3	22.2	20.3	21.7	24.4	23.4	23.9	26.8	25.6	26.2
4	21.7	20.4	20.9	20.3	18.8	19.7	24.5	23.7	24.1	26.0	24.4	25.1
5	22.4	21.3	21.7	20.4	18.2	19.3	24.4	22.3	23.4	26.4	24.9	25.6
6	21.3	19.4	20.1	20.2	18.1	19.3	25.2	22.4	23.6	27.2	25.4	26.2
7	19.4	17.9	18.6	18.1	17.1	17.7	26.1	23.7	24.7	27.2	25.6	26.4
8	19.2	17.4	18.4	18.4	16.6	17.6	26.4	24.6	25.4	27.7	24.7	26.3
9	20.1	18.4	19.2	18.4	17.5	17.9	25.9	24.9	25.3	28.9	25.9	27.4
10	20.5	19.7	20.1	18.9	18.1	18.7	26.5	24.7	25.5	29.5	27.0	28.2
11	21.2	20.4	20.7	19.2	17.5	18.4	26.1	24.6	25.4	29.3	26.7	27.4
12	21.1	20.1	20.7	20.4	18.1	19.2	25.4	23.3	24.3	26.7	25.2	25.7
13	20.1	18.7	19.4	21.5	19.5	20.3	24.0	22.1	23.2	27.6	25.3	26.3
14	19.6	18.1	18.9	23.5	21.0	22.1	23.6	21.8	22.8	28.6	26.3	27.4
15	20.5	19.4	19.9	23.8	21.9	22.8	23.6	21.6	22.6	28.3	26.6	27.5
16	20.5	19.4	19.8	23.1	21.4	22.0	23.2	22.1	22.6	27.6	25.8	26.8
17	19.8	18.5	19.2	23.3	21.8	22.4	24.4	22.5	23.4	27.4	25.7	26.6
18	19.6	18.3	19.2	24.1	22.8	23.3	24.0	21.4	22.7	28.2	25.3	26.7
19	19.4	18.3	18.9	23.2	21.4	22.2	24.1	21.7	22.9	28.9	25.7	27.3
20	20.9	19.1	19.8	22.1	20.0	21.1	23.9	22.4	23.2	29.8	26.2	28.1
21	22.2	20.7	21.4	22.3	19.9	21.1	24.5	23.5	23.9	30.2	27.5	28.9
22	22.0	20.6	21.4	23.2	20.7	21.9	26.2	24.2	25.0	29.7	27.8	28.8
23	21.4	20.0	20.8	22.6	21.0	21.7	26.2	25.2	25.7	30.7	27.9	29.3
24	22.4	20.8	21.5	22.0	20.2	21.2	26.1	25.0	25.5	31.0	28.5	29.7
25	23.2	21.0	22.0	22.1	20.3	21.3	25.8	25.2	25.3	30.9	28.6	29.7
26	22.7	20.4	21.2	24.1	21.3	22.5	25.5	23.8	24.8	30.4	28.5	29.5
27	20.4	18.7	19.6	24.3	22.6	23.3	25.1	24.0	24.7	30.5	28.2	29.4
28	20.2	18.0	19.2	24.0	23.1	23.3	25.1	22.9	24.0	31.0	28.0	29.5
29	21.5	19.5	20.3	23.2	22.2	22.7	24.8	22.6	23.8	30.6	28.0	29.4
30	---	---	---	24.1	22.8	23.4	25.2	22.8	24.1	30.8	27.6	29.2
31	---	---	---	24.2	23.7	23.9	---	---	---	31.1	28.0	29.6
Month	23.2	16.1	19.9	24.3	16.6	21.1	26.5	21.4	24.1	31.1	24.4	27.6

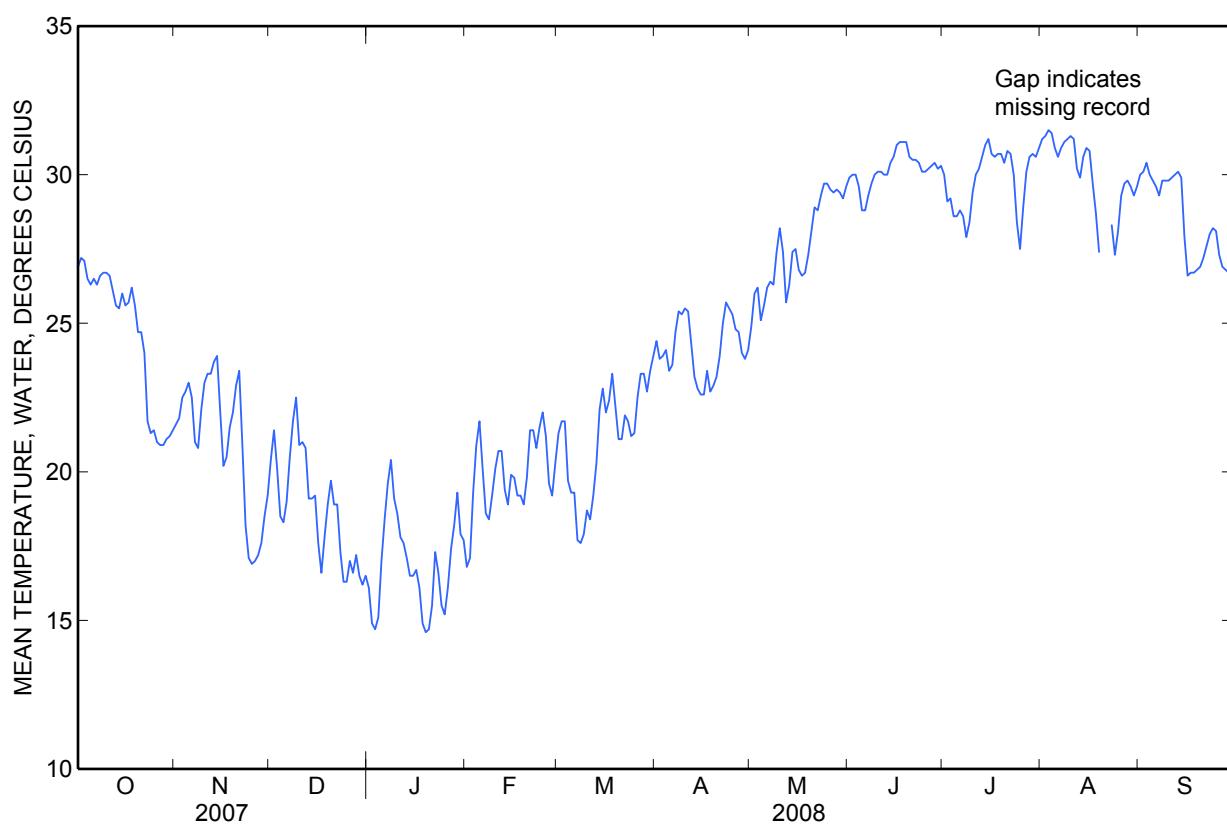
Water-Data Report 2008

08181800 San Antonio River near Elmendorf, TX—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	June			July			August			September		
1	31.5	28.1	29.9	31.1	28.9	30.0	32.7	29.7	31.2	31.0	29.1	30.0
2	31.4	28.4	30.0	29.8	28.1	29.1	33.0	29.8	31.3	31.4	29.0	30.1
3	31.5	28.3	30.0	30.7	28.1	29.2	33.2	29.8	31.5	31.3	29.5	30.4
4	30.7	28.1	29.6	29.5	27.8	28.6	33.0	29.7	31.4	30.9	28.9	30.0
5	30.0	28.0	28.8	29.4	27.8	28.6	32.2	29.7	30.9	30.9	28.6	29.8
6	29.9	27.7	28.8	30.3	27.6	28.8	31.9	29.4	30.6	30.6	28.5	29.6
7	30.6	28.1	29.3	29.3	28.0	28.6	32.2	29.5	30.9	30.3	28.2	29.3
8	30.9	28.4	29.7	28.1	27.6	27.9	32.5	29.7	31.1	30.9	28.9	29.8
9	31.4	28.6	30.0	29.5	27.3	28.4	32.9	29.5	31.2	30.7	29.0	29.8
10	31.7	28.6	30.1	30.6	28.4	29.4	33.0	29.5	31.3	30.7	29.0	29.8
11	31.6	28.6	30.1	31.2	28.8	30.0	32.5	29.8	31.2	30.8	29.0	29.9
12	31.6	28.4	30.0	31.7	28.7	30.2	31.6	29.6	30.2	30.8	29.2	30.0
13	31.3	28.5	30.0	32.0	29.0	30.6	31.0	28.7	29.9	31.2	29.0	30.1
14	32.1	28.8	30.4	32.5	29.3	31.0	32.1	29.4	30.6	30.8	29.5	29.9
15	32.6	28.8	30.6	32.4	29.6	31.2	32.2	29.6	30.9	29.5	26.8	27.9
16	32.9	29.1	31.0	32.0	29.5	30.7	32.3	29.6	30.8	27.5	25.9	26.6
17	32.9	29.1	31.1	31.7	29.3	30.6	31.1	29.2	29.7	28.2	25.5	26.7
18	32.8	29.3	31.1	32.0	29.2	30.7	29.2	27.5	28.7	27.6	25.9	26.7
19	32.9	29.2	31.1	32.0	29.2	30.7	27.9	26.8	27.4	28.2	25.5	26.8
20	31.6	29.2	30.6	31.7	29.0	30.4	---	---	---	28.3	25.5	26.9
21	31.9	28.7	30.5	32.3	29.2	30.8	---	---	---	28.4	26.0	27.2
22	31.9	28.7	30.5	32.2	29.1	30.7	29.1	---	---	28.6	26.7	27.6
23	31.7	28.8	30.4	31.3	29.4	30.0	28.7	27.8	28.3	29.1	27.1	28.0
24	31.4	28.6	30.1	29.6	26.4	28.4	27.9	26.5	27.3	29.1	27.4	28.2
25	31.6	28.7	30.1	28.4	26.5	27.5	29.5	27.0	28.1	29.2	27.2	28.1
26	31.6	28.7	30.2	30.3	27.9	28.9	30.4	28.4	29.3	28.6	26.0	27.3
27	31.8	28.6	30.3	31.3	28.9	30.1	30.6	28.9	29.7	27.7	25.6	26.9
28	32.3	28.7	30.4	31.9	29.3	30.6	30.6	29.2	29.8	27.6	25.7	26.8
29	31.4	28.8	30.2	32.1	29.3	30.7	30.2	29.3	29.6	28.0	25.6	26.7
30	31.4	29.1	30.3	31.8	29.4	30.6	30.1	28.6	29.3	27.9	24.8	26.4
31	---	---	---	32.5	29.5	30.9	30.5	28.6	29.6	---	---	---
Month	32.9	27.7	30.2	32.5	26.4	29.8	---	---	---	31.4	24.8	28.4

08181800 San Antonio River near Elmendorf, TX—Continued



08181800 San Antonio River near Elmendorf, TX—Continued
DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	October				November				December			
1	7.6	7.3	7.4	9.3	8.3	8.7	8.6	8.2	8.4	11.3	10.3	10.7
2	7.5	7.2	7.3	9.4	8.2	8.7	8.6	8.0	8.2	11.8	10.7	11.1
3	7.9	7.0	7.4	9.4	8.2	8.7	8.9	8.2	8.5	11.7	10.7	11.2
4	8.1	7.3	7.6	9.4	8.2	8.7	9.2	8.5	8.8	11.3	10.6	11.0
5	8.1	7.4	7.7	9.3	8.1	8.6	9.2	8.6	8.8	11.1	10.2	10.6
6	8.1	7.4	7.7	8.8	7.9	8.4	9.2	8.5	8.8	10.8	9.6	10.1
7	8.1	7.4	7.7	9.1	8.3	8.7	8.9	8.3	8.6	10.1	9.2	9.6
8	8.0	7.4	7.7	9.4	8.6	8.9	8.7	8.1	8.3	10.1	8.9	9.4
9	8.0	7.4	7.6	9.2	8.4	8.7	8.5	7.9	8.2	10.6	9.1	9.7
10	8.2	7.3	7.7	8.8	8.1	8.5	8.5	7.5	8.2	10.8	9.2	9.9
11	8.1	7.4	7.7	8.8	8.1	8.4	8.8	8.1	8.4	10.8	9.3	9.9
12	8.2	7.4	7.8	8.9	8.0	8.3	8.7	8.2	8.4	10.9	9.3	9.9
13	8.3	7.5	7.8	8.8	8.0	8.3	9.1	8.6	8.8	11.0	9.5	10.1
14	8.2	7.5	7.8	8.7	8.0	8.3	8.9	8.7	8.8	10.7	9.5	10.0
15	8.1	7.5	7.8	9.0	8.1	8.5	9.2	8.8	8.9	10.1	9.5	9.7
16	7.8	7.3	7.6	9.4	8.5	8.9	9.7	9.1	9.4	10.4	9.5	9.8
17	8.0	7.4	7.7	8.8	8.5	8.6	10.1	9.6	9.8	10.5	9.5	9.9
18	7.9	7.3	7.5	8.6	8.2	8.4	9.8	9.5	9.7	10.3	9.7	10
19	8.1	7.4	7.7	8.5	8.2	8.3	9.6	9.2	9.4	10.9	9.9	10.3
20	8.2	7.5	7.8	8.4	7.9	8.1	9.6	9.0	9.3	10.8	10.0	10.4
21	8.3	7.5	7.8	8.3	7.8	8.0	9.9	9.2	9.5	10.2	9.7	9.9
22	8.1	7.5	7.8	8.7	7.9	8.3	10.0	9.3	9.6	9.8	9.3	9.5
23	8.6	7.8	8.2	9.1	8.6	8.8	10.6	9.7	10.1	9.7	9.1	9.3
24	8.6	8.0	8.3	9.2	8.8	8.9	10.9	10.1	10.4	10.2	9.4	9.7
25	8.7	8.0	8.3	9.2	8.8	9.0	10.9	10.1	10.5	10.0	9.6	9.8
26	8.8	8.1	8.4	9.1	8.9	9.0	11.0	10.1	10.5	10.2	9.5	9.8
27	8.8	8.2	8.5	9.2	8.8	9.0	11.1	10.3	10.6	9.9	9.2	9.5
28	8.9	8.2	8.5	9.1	8.8	8.9	11.0	10.2	10.5	9.5	8.9	9.1
29	8.9	8.1	8.4	9.0	8.6	8.8	11.1	10.2	10.6	9.3	8.5	8.9
30	8.9	8.0	8.4	8.9	8.4	8.6	11.2	10.4	10.7	9.7	8.8	9.2
31	9.3	8.0	8.6	---	---	---	11.1	10.3	10.6	10.1	9.0	9.5
Month	9.3	7.0	7.9	9.4	7.8	8.6	11.2	7.5	9.3	11.8	8.5	9.9

08181800 San Antonio River near Elmendorf, TX—Continued
DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	February				March				April			
1	10.5	9.4	9.9	9.3	8.4	8.8	8.3	7.6	7.8	8.0	7.6	7.8
2	10.5	9.6	10	8.9	8.2	8.5	8.3	7.7	8.0	7.9	7.5	7.7
3	9.9	9.2	9.5	9.1	7.9	8.4	8.4	7.9	8.1	8.0	7.4	7.7
4	9.6	8.6	9.1	9.2	8.5	8.8	8.4	7.9	8.1	8.1	7.6	7.8
5	9.7	8.4	8.9	9.6	8.7	9.0	8.6	8.1	8.3	8.0	7.5	7.7
6	10.4	8.6	9.4	8.8	8.5	8.7	8.6	8.0	8.3	7.9	7.4	7.6
7	10.9	9.3	10	9.9	8.8	9.3	8.4	7.8	8.1	8.0	7.3	7.6
8	11.0	9.5	10.1	9.8	9.2	9.5	8.2	7.6	7.9	8.3	7.4	7.8
9	10.8	9.4	10.0	9.4	9.0	9.2	8.0	7.6	7.7	8.3	7.4	7.8
10	10.4	9.2	9.8	9.1	8.2	8.8	8.1	7.5	7.8	8.1	7.2	7.6
11	10.2	9.1	9.5	9.0	8.2	8.7	8.2	7.5	7.8	8.5	7.1	7.7
12	10.0	8.8	9.3	8.9	8.5	8.7	8.5	7.7	8.1	8.2	7.4	7.8
13	11.0	9.3	10.0	8.5	8.2	8.3	8.6	8.0	8.3	8.3	7.4	7.8
14	10.8	9.8	10.3	8.4	8.0	8.2	8.8	7.9	8.3	8.2	7.2	7.7
15	10.1	9.5	9.8	8.3	7.6	8.0	8.7	8.0	8.3	8.2	7.2	7.6
16	9.8	9.2	9.5	8.3	7.8	8.0	8.7	7.9	8.3	8.4	7.3	7.8
17	10.4	9.3	9.8	8.4	7.8	8.1	8.6	7.9	8.2	8.5	7.3	7.9
18	10.4	9.4	9.9	8.2	7.6	7.9	8.2	6.5	7.5	8.7	7.4	8.0
19	10.4	9.5	9.9	8.9	7.8	8.3	8.1	7.6	7.9	8.6	7.3	7.9
20	10.0	9.2	9.6	9.2	8.3	8.7	8.0	7.8	7.9	8.5	7.1	7.7
21	9.7	8.9	9.3	9.3	8.4	8.9	7.9	7.6	7.8	8.6	6.8	7.6
22	9.7	8.7	9.1	9.1	8.4	8.8	7.7	7.5	7.6	8.4	6.7	7.5
23	9.6	8.7	9.1	9.2	8.2	8.7	7.7	7.4	7.5	8.7	6.8	7.6
24	9.7	8.8	9.2	9.5	8.5	9.0	7.8	7.4	7.6	8.5	6.9	7.6
25	9.4	8.4	8.8	9.3	8.5	8.9	7.7	7.4	7.6	8.4	6.9	7.6
26	9.5	8.3	8.8	9.1	8.3	8.7	7.7	6.9	7.3	8.2	6.9	7.5
27	9.9	8.7	9.2	8.8	8.0	8.4	7.7	7.3	7.4	8.4	6.9	7.7
28	10.0	9.0	9.4	8.5	7.9	8.2	7.9	7.6	7.8	8.5	7.0	7.8
29	9.6	8.7	9.1	8.6	7.9	8.2	8.1	7.7	7.9	8.8	6.9	7.8
30	---	---	---	8.4	7.9	8.1	8.2	7.8	8.0	9.0	7.0	7.9
31	---	---	---	8.3	7.0	7.7	---	---	---	8.9	7.1	7.9
Month	11.0	8.3	9.5	9.9	7.0	8.6	8.8	6.5	7.9	9.0	6.7	7.7

Water-Data Report 2008

08181800 San Antonio River near Elmendorf, TX—Continued**DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	
				June			July			August			September
1	9.1	7.1	8.0	8.1	6.6	7.2	8.1	6.4	7.1	7.7	6.8	7.3	
2	8.9	7.1	7.9	8.1	6.6	7.3	8.4	6.5	7.2	7.9	6.8	7.2	
3	9.0	7.2	7.9	8.5	6.5	7.4	8.5	6.5	7.2	7.7	6.7	7.1	
4	8.6	6.6	7.6	6.8	4.0	5.5	8.7	6.4	7.3	7.9	6.8	7.2	
5	8.3	6.7	7.4	6.9	5.4	6.3	8.2	6.4	7.0	8.0	6.9	7.3	
6	8.1	6.8	7.4	7.3	6.6	6.9	8.1	6.3	7.1	8.0	6.9	7.4	
7	8.2	6.8	7.4	7.1	6.6	6.9	7.9	6.5	7.1	8.1	7.0	7.5	
8	8.2	6.8	7.4	6.9	6.5	6.7	8.0	6.5	7.1	7.8	6.9	7.3	
9	8.2	6.7	7.4	6.9	6.0	6.6	8.7	6.4	7.3	8.0	6.8	7.2	
10	8.6	6.7	7.4	7.1	6.5	6.8	9.0	6.4	7.4	8.2	6.7	7.4	
11	8.6	6.7	7.4	7.0	6.6	6.8	9.1	6.4	7.4	8.1	6.8	7.3	
12	8.7	6.8	7.5	7.2	6.5	6.9	7.7	6.3	6.8	8.1	6.8	7.4	
13	8.4	6.7	7.4	7.6	6.5	7.0	8.1	6.4	7.1	8.2	6.7	7.3	
14	8.6	6.6	7.4	8.0	6.5	7.2	8.1	6.4	7.1	7.9	6.6	7.2	
15	8.8	6.6	7.4	7.5	6.4	6.9	7.7	6.5	7.0	8.1	6.8	7.4	
16	9.1	6.6	7.5	8.2	6.3	7.1	8.2	6.5	7.2	8.3	7.0	7.5	
17	9.2	6.5	7.5	8.1	6.4	7.2	7.3	6.6	6.9	8.7	7.1	7.8	
18	9.0	6.5	7.5	8.4	6.4	7.3	7.0	5.6	6.7	8.6	7.2	7.8	
19	9.4	6.5	7.6	8.6	6.4	7.3	6.9	6.1	6.6	8.6	7.2	7.8	
20	8.9	6.5	7.4	8.5	6.4	7.3	---	---	---	8.7	7.1	7.7	
21	8.6	6.6	7.5	8.6	6.4	7.3	---	---	---	8.5	7.1	7.7	
22	8.9	6.6	7.5	8.4	6.5	7.3	---	---	---	7.9	7.0	7.4	
23	9.4	6.6	7.7	8.2	6.4	7.2	7.0	6.8	6.9	7.8	6.8	7.2	
24	9.1	6.8	7.7	7.3	5.1	6.7	7.1	6.6	7.0	7.8	6.7	7.2	
25	8.9	6.6	7.5	6.7	5.2	6.5	6.9	6.4	6.7	8.0	6.8	7.3	
26	8.9	6.6	7.5	6.7	6.6	6.7	6.9	6.7	6.8	8.1	6.9	7.4	
27	9.0	6.6	7.6	6.7	6.6	6.6	7.2	6.8	6.9	8.0	6.9	7.4	
28	9.2	6.6	7.6	6.9	6.5	6.7	7.4	6.8	7.0	8.0	7.0	7.5	
29	8.5	6.6	7.4	7.2	6.5	6.8	7.3	6.8	7.0	8.0	7.0	7.4	
30	8.2	6.5	7.3	7.6	6.5	7.0	7.5	7.0	7.2	8.0	7.1	7.4	
31	---	---	---	7.9	6.5	7.1	7.8	7.0	7.3	---	---	---	
Month	9.4	6.5	7.5	8.6	4.0	6.9	---	---	---	8.7	6.6	7.4	

08181800 San Antonio River near Elmendorf, TX—Continued